CLAIMS

We claim:

1. A variable folder having a product strand path extending therethrough, said variable folder comprising:

a cross-cutting arrangement including a cutting cylinder and at least one cutting blade carried on said cutting cylinder functional for cutting a product from a feeding web strand fed along the product strand path, said at least one cutting blade having a plurality of recesses functioning to leave residual crosspieces in said feeding web strand by which said product remains connected to said feeding web strand;

a collecting cylinder located downstream of said cross-cutting arrangement along the product strand path;

a product directing arrangement which leads from said cross-cutting arrangement to said collecting cylinder; and

accelerating and tearing-off cams at a location between said cross-cutting arrangement and said collecting cylinder through which said product passes, said accelerating and tearing-off cams operable for gripping said product to tear off said product from said feeding web strand at said residual crosspieces.

2. A variable folder according to claim 1, wherein said cutting blade has three recesses, said recesses being arranged to register with border regions and a center of said feeding web strand.

3. A variable folder according to claim 1, wherein each residual crosspiece has an accelerating and tearing-off cam associated therewith.

4. A variable folder according to claim 1, wherein said accelerating and tearing-off cams are arranged to register with print-free regions of said feeding web strand.

5. A variable folder according to claim 1, further comprising first and second drawing arrangements arranged one after another upstream of said cross-cutting arrangement, said first and second drawing arrangements each operating at a circumferential speed which is greater than a speed of said feeding web strand received from upstream printing units by a lead which is adjustable.

6. A variable folder according to claim 5, further comprising a third drawing arrangement arranged between said cross-cutting arrangement and said accelerating and tearing-off cams, said third drawing arrangement being operable at the circumferential speed of said first and second drawing arrangements.

7. A variable folder according to claim 6, wherein said accelerating and tearing-off cams are operable at a higher circumferential speed than the circumferential speed at which said first, second and third drawing arrangements are operable.

8. A variable folder according to claim 1, further comprising a driven roller, said accelerating and tearing-off cams interacting with said driven roller.

9. A variable folder according to claim 8, wherein a ratio of a speed of said driven roller to a speed of said accelerating and tearing-off cams is other than a whole number.

10. A variable folder according to claim 1, wherein said product-directing arrangement comprises a belt directing system which in operation is product non-engageable.

11. A variable folder according to claim 1, wherein said product-directing arrangement comprises tongues.